

LAPISOVA, N.P.; GOL'DSHTEYN, A.L.

Determination of hexaethyldilead in tetraethyllead. Zhur. anal. khim.  
16 no. 4:508-509 J1-Ag '61. (MIRA 14:7)  
(Lead)

GOL'DSHEYN, A.L.; LAPISOVA, N.P.; SHTEFMAN, I.M.

Determination of hexaethyldilead in ethyl fluid. *Laur. anal. khim.*  
17 no.1:143-144 Ja-F '62. (MIRA 15:2)  
(Lead--Analysis)

SOV/65-58-9-7/16  
 D. S.; Petrova, Ye. N;  
 Gol'dshteyn, A. I.; Stasinevich, D. S.; Gladchenko, A. I.  
 AUTHORS: Comparing the Effectiveness of Additives which Prevent  
 the Sedimentation of Lead Deposits in Ethylated Petrols.  
 TITLE: (Sravneniye effektivnosti prisadok, predotvrashchayushchikh  
 vypadeniye svintsovykh osadkov iz etilirovannykh benzinov)  
 PERIODICAL: Khimiya i Tekhnologiya Topliv i Masel, 1958, No 9,  
 pp 35 - 37, (USSR)  
 ABSTRACT: Anti-oxidants such as 2,4,6-trialkylphenols and N-substi-  
 tuted paraminophenols are used predominantly for this  
 purpose; parahydroxydiphenylamine (N-phenylparaminophenol)  
 (Ref 1 and 2) are used in the USSR and N-butylparamino-  
 phenol and 2,6-di-tert.-4-methylphenol (BtF) in the USA  
 and other Western countries. The authors compared the  
 effectiveness of BtF and of parahydroxydiphenylamine as  
 stabilisers preventing the sedimentation of lead deposits  
 in ethylated aviation fuels. Their effect as inhibitors  
 was also tested. Samples of the fuel were heated in  
 sealed glass ampules over a water bath. The concentration  
 of the stabiliser was so adjusted that its concentration  
 in the fuel = 0.002, 0.004 and 0.008. Data on the  
 effectiveness of the investigated stabiliser in various

Card 1/2

30648

S/C61/61/000/020/073/089  
B/C6/B147

53700

AUTHORS: Stasinevich, D. S., Gol'dshchegov, A. L.

TITLE: Reaction of tetraethyl lead with hydrocarbon halides

PERIODICAL: Referativnyy zhurnal. Khimiya no. 20, 1961, 320, abstract  
20L34 (Tr. po khimii i khim. tekhnol. (Gor'kiy), no. 2, 1960,  
209-213)

TEXT: It was established that  $Pb(C_2H_5)_4$  reacts with  $C_2H_4Br_2$ ,  $C_2H_2Br_4$ , and some other hydrocarbon halides, at  $75^\circ C$  and an atomic ratio  $Pb : halide = 1 : 2$ . The ethyl radicals are replaced by halides and, subsequently, triethyl and diethyl lead dihalides are formed. A mechanism explaining the initiation of the process by the oxidation of  $Pb(C_2H_5)_4$ , and the further course of reaction according to a chain system was proposed.

13545

3/19/60/000/01/001/016  
B013/B054

15801

AUTHORS G. I. Lichten, A. L. Lapisova, N. P. Jorina, N. P.

TITLE Use of Tetraethyl Lead as a Component of the Catalyst for  
Low Pressure Ethylene Polymerization

IN JOURNAL Zh. fiz. khim., 1960, Vol. 34, p. 4

TEXT The work established the possibility of using tetraethyl lead for  
ethylene polymerization. It was found that polyethylene can be obtained in  
the presence of a catalyst consisting of tetraethyl lead and titanium  
tetrachloride. Polymerization was conducted both at atmospheric pressure  
and in an autoclave at low pressure. The use of a certain pressure favored  
certain stages of the process, and increased the yield. The poly-  
ethylene was obtained with alcohol, with alcohol saturated with hydro-  
chloric acid, and with a mixture of alcohol and aqueous solution of ammonium  
acetate. The result was a snow-white polymer containing no tetraethyl lead  
nor any other alkyl-containing lead compounds. The melting point of the  
resulting polyethylene is 126° - 127°C. The viscosity of a 1% solution

Card 100



ABRAMOVICH, A.D., kand. tekhn. nauk; ANTONOV, M.P., kand. tekhn. nauk; KAPLEN, G.A., inzh.-ekonomist; LEVIT, A.B., inzh.-zarleustroitel'; LISTENGURT, F.M., kand. geogr. nauk; SAMOILOV, Ya.I., kand. tekhn. nauk; STOLYAR, I.M., kand. arkhitek.; SOLOV'NIKOV, L.A., kand. arkhitek.; STELICOV, V.I., kand. arkhitek.; FLEBYEV, V.G., inzh.; Iridimeli uchastnye: BUTUROVA, V.F.; GLABINA, N.K.; GOL'DSHTEIN, A.M.; DERYANOVSKIY, V.S.; KAPLAN, G.L.; FEDOTOVA, L.A.; TSEYTLIN, G.I.; KURLAKOV, N.Ye., red.; KORNENYETS, Z.I., red. 2nd-ed.; GOLOVKINA, A.A., tekhn. red.

[Regional planning of economic administrative regions, industrial regions and centers; planning guide] Naionnaia planirovka ekonomicheskikh i administrativnykh raionov, promyshlennykh raionov i uslov; rukovodstvo po proektirovaniu. Pod red. N.I. Kurlakova. Moskva, Gosstroizdat, 1963. 266 p.

(MIRA 15:10)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut gradostroitel'stva i raionnoi planirovki. 2. Zarechnitel' direktora po nauchnoy rabote nauchno-issledovatel'skogo instituta gradostroitel'stva i raionnoi planirovki (for Kurlakov). 3. Nauchno-issledovatel'skiy institut gradostroitel'stva i raionnoi planirovki (for Buturova, Glabina, Gol'dsheyn, Deryanovskiy, Kaplan, Fedotova, Tseytlin).

(Regional planning)

RYAZANOV, V.S.; BUTKOVA, V.P.; SIMONOV, G.V.; GOL'DSHEIN, A.M.;  
KORNEYEV, N.A.; POMOYLOV, Ya.M.; LYCYKH, I.V.;  
KHEMEL'NITSKIY, G.S.; KRUTIKOV, Ye.B.; ANTONOV, M.F.;  
DOBROSEL'SKAYA, T.M.

[Recommendations for the establishment of schemes for  
planning farming areas] Rekomendatsii po sostavleniiu  
skhem planirovki sel'skokhoziaistvennykh raionov. Moskva,  
Stroiizdat, 1965. 151 p. (MIRA 18:7)

1. Moscow. Tsentral'nyy nauchno-issledovatel'skiy i  
proyektnyy institut po gradostroitel'stvu. 2. Tsentral'-  
nyy nauchno-issledovatel'skiy i proyektnyy institut po  
gradostroitel'stvu, Moskva.



GOL'DSHTEYN, A.N.; ZAVERTKIN, R.A.

Corrosion of reinforced concrete structures under the action  
of stray currents. Prom. stroi. 40 no.7:25-29 J1 '63.  
(MIRA 16:10)

1. Vsesoyuznyy zaochnyy politekhnicheskii institut.

GOLDSHTEYN, A. N.

Effect of stray currents during electric welding on the strength of reinforced concrete elements, From: *Stray Currents*, 1965, Vol. 1, No. 1, p. 1-10.

GOL'DSTEIN, Abram Samoylovich; KILYENKO, Vladimir Lvovich;  
ZUBALOVA, Ye.I., red. red.

[Suspended and arched passage of petroleum products] Vi-  
siachie i korchnye perekhody nefteprovodov. Moskva,  
Nedra, 1967. 115 p. (MIRA 17:6)

GOLDSTEIN, A.S., Inc.

Dry field joint of square reinforced concrete filler.  
Trans. prot. 15 no. 11:50-51 N 105. (11:11)

KOTEL'NIKOV, V.N., kand.tekhn.nauk; CHENTSOVA, E.I., kand.tekhn.nauk;  
 ZYBIN, Yu.P., doktor tekhn.nauk; KOCHETKOVA, T.S.; ZAKATOVA, N.D.,  
 kand.tekhn.nauk; GUBAREV, A.S., kand.tekhn.nauk; SHVETSOVA, T.P.,  
 inzh.; VOROB'YEVA, A.A., kand.tekhn.nauk; MIRSKIY, V.I., inzh.;  
 NISNEVICH, Ye.A., kand.tekhn.nauk; GOL'DSHTEYN, A.V., inzh.;  
 KALASHNIKOVA, T.A., inzh.; SHUSTOROVICH, M.L., kand.tekhn.nauk;  
 MOREKHODOV, G.A., inzh.; ZAKHAROV, S.R., retsenzent; BLAGOVESTOV,  
 B.K., retsenzent; STRONGINA, O.P., retsenzent; SHMIDT, M.I., re-  
 tsenzent; ZUYEV, V.T., retsenzent; KOSAREV, M.I., retsenzent;  
 STEPANOV, I.S., retsenzent; RAMM, S.N., retsenzent; PEVZNER, B.M.,  
 retsenzent; VEYNBERG, I.A., retsenzent; TURBIN, A.S., retsenzent,  
 SMIRNOVA, Ye.V., retsenzent; BUGOSLAVSKAYA, L.A., retsenzent;  
 GAMOVA, A.S., retsenzent; KHANIN, N.M., retsenzent; NURVANIDZE,  
 D.S., red.; PLEMYANNIKOV, M.N., red.; GRACHEVA, A.V., red.; MEDVEDEV,  
 I.Ya., tekhn.red.

[Shoemaker's handbook] Spravochnik obuvshchika. Vol.1. Moskva,  
 Gos.nauchno-tekhn.izd-vo lit-ry po legkoi promyshl. 1958. 540 p.  
 (MIRA 12:4)

1.Gosudarstvennaya Ordena Lenina i Ordena Trudovogo Krasnogo Znameni  
 obuvnaya fabrika "Skorokhod" imeni Ya.Kalinina (for Zakharov, Blago-  
 vestov, Strongina, Shmidt, Zuyev, Kosarev, Stepanov, Ramm, Pevzner,  
 Veynberg, Turbin, Smirnova, Bugoslavskaya, Gamova, Khanin).  
 (Shoe manufacture)

KATUNIN, V. Kh.: GOLDSTEIN, A. Ya.; Eds.

Acetic Acid

Ways to economize on auxiliary chemicals in the production of esters of acetic acid and methanol. Dokl. Akad. Nauk SSSR, No. 2, 1953.

9. Monthly List of Russian Accessions, Library of Congress, June 1953. Unclassified.

5,124,100 001'000 01.  
5124-204

AUTHORS: Tendler V. M., Golitshteyn A. Ya.

TITLE: The vacuum impregnation of the glass filler and the forming of products from glass-reinforced plastic.

PERIODICAL: Plasticheskiye massy, no. 2, 1961, 5-11

TEXT: The present investigation had the purpose of obtaining initial data for working out the technology of the mechanized production of life boats, for which vacuum forming appears to be the most promising method. All experiments were carried out with the cold-hardened polyester maleate resin of the type EH-1 (PN-1); as initiator isopropylbenzene hydroperoxide (Giperiz) and as an accelerator cobalt naphthenate was used. The glass filler was impregnated in a special mold (Fig. 1), consisting of two plates of organic glass, which was pressed together by means of clamps and which were sealed by means of a rubber liner in a special groove. In the mold, a rarefaction of from 750 to 760 mm Hg may easily be attained and maintained. In the method of vacuum impregnation the air is sucked

Card 1/2

The vacuum impregnation of the

S. 191/61/000/002/009/012  
R24.5204



out from a hermetically sealed mold containing the glass filler and the resin is pressed into the mold by the external air pressure. The principal factor of the technological procedure is the rate of impregnation and its dependence on various factors. For the impregnation time  $T$  the relation  $l = \eta \mu H^2$  holds, where  $\eta$  is the resistivity,  $\mu$  - the dynamic viscosity coefficient of the resin,  $P$  - the pressure during impregnation, and  $H$  is the way taken by the impregnating agent. As determining the resistivity of the material is difficult, the impregnation time of an arbitrary product is calculated from the data obtained during impregnation, where  $T = T_0 (H/H_0)$  with  $\eta, \mu$  and  $P = \text{const}$  (2),  $T = T_0 (\eta/\eta_0)$  with  $H, \mu$  and  $P = \text{const}$  (3),  $T = T_0 (P_0/P)$  with  $H, \eta$  and  $\mu = \text{const}$  (4) ( $T_0$  denotes the impregnation time of the standard sample). For the vacuum impregnation process the same relations hold with satisfactory accuracy as for the filtration process. With an increase of pressure to 1.5 folds the impregnation time is shortened approximately in the same proportion, and if the way is 1.5 fold, the impregnation time rises to four times its

Card 1/3



The vacuum impregnation of the...

S/191/51/000/002/009/012  
3124/3204

amount (Fig. 2). The service life of resin decreases especially strongly with the temperature within the range of from 20 to 40°C (Fig. 3). The viscosity of resin does not change during about 90% of the service life of the resin (Fig. 4). The forming process is carried out either in a mold with fixed cavity and fixed punch (Fig. 5a), or in a mold with closed elastic punch (Fig. 5 b). The laboratory assistants K. G. Aristarkhov and O. A. Zharunov as well as the senior technician A. G. Ionis took part in the experiments. There are 6 figures and 1 table.

Card 3/8

GOL'DSHTEYN, A.Yu.

Electric fork lift truck. Biul.tekh.-ekon.inform. no.8:77-79 '61.  
(MIRA 14:8)

(Fork lift trucks)

"APPROVED FOR RELEASE: 09/24/2001

CIA-RDP86-00513R000515710011-0

10/11/77, 10/11/77, 10/11/77  
10/11/77, 10/11/77, 10/11/77

10/11/77, 10/11/77, 10/11/77  
10/11/77, 10/11/77, 10/11/77

APPROVED FOR RELEASE: 09/24/2001

CIA-RDP86-00513R000515710011-0"

GOL'DSHTEYN, B., inzh.

Pneumatic vibrators. Na stroi. Nos. 3 no.10:2 of cover 0 '62.

1. Vsesoyuznyy nauchno-issledovatel'skiy institut stroitel'nogo i dorozhnogo mashinostroyeniya.  
(Vibrators)

GOL'DSHTEYN, B., inzhener.

Building Moscow refrigeration plant of precast reinforced concrete.  
Stroitel' 2 no.9:6-7 S '56. (KLRA 10:1)  
(Moscow-Refrigeration and refrigerating machinery)  
(Precast concrete construction)

GOL'DSHTEYN, B.A., kandidat tekhnicheskikh nauk [deceased]

Calculating light intensity of fixtures installed at an inclined angle. Svetotekhnika 1 no.3:21-24 Je'55. (MIRA 8:10)

1. Khar'kovskoye otdeleniye Gosudarstvennogo politekhnicheskogo instituta "Tyazhpromoelektroproyekt"  
(Electric lighting)

It is not clear how the two different types of information are processed. The authors suggest that the two types of information are processed in different ways, and that the two types of information are processed in different ways.

GOL'DSHEYN, B.G., inzh.

Increasing the life of vibration life of mechanisms in the vibration.  
Strel. i dor. mashinost. 3 no.9:25-26 S 1971.  
(Vibrators) (1971 11:10)



18.7100  
18.1110

67415

30V/123-59-12-46680

Translation from: Referativnyy zhurnal. Mashinostroyeniye, 1959, Nr 12, p 108 (USSR)

AUTHORS: Gol'dshteyn, B.G., Vinogradov, A.I.

TITLE: The Hardening of Carbon Steel Tools in Molten Salts

PERIODICAL: Yaroslavsk. prom-st' (Sovnarkhoz Yaroslavsk. ekon. adm. r-na), 1958, Nr 6, pp 15-18; Stroit. i dor. mashinost., 1958, Nr 11, pp 34-36

ABSTRACT: In order to reduce residual stresses and to obtain high mechanical properties in tools of carbon steel, it is recommended to apply a staggered cycle of treatment with cooling in molten salts at 110 - 125°C, soaking for 1 - 5 minutes and cooling in the air. The composition of the mixture is: 53% KNO<sub>3</sub>, 40% NaNO<sub>2</sub>, 7% NaNO<sub>3</sub> with an addition of 2 - 3.5% of water; the melting point is 100°C. Provided that intensive agitation is taking place, a hardness of Rc 60 is obtained for tools of carbon steel with a thickness up to 60 - 80 mm. If the machine parts to be hardened, made of U8 and U10 grade steel, are vibrantly moved, a hardness of Rc 62 - 64 can be obtained. Staggered hardening, owing to a decrease in residual stresses, ensures a minimum of deformation of the tool and practically completely eliminates the risk of hardening cracks. Since cooling in molten salts at

Card 1/2

4

The Hardening of Carbon Steel Tools in Molten Salts

57415

SCV/123-59-12-560

a temperature of 110 - 125°C reduces the thickness of the hardened layer. compared cooling in water, it is expedient to increase the heating temperature of hardening up 820 - 840°C. A decrease in deformation at cooling of complicated shape can be obtained by subjecting the blanks to intermediate heat treatment. Staged heat treatment can be efficiently employed for the hardening of cemented machine parts from low carbon steel up to 80 mm in thickness, as well as of complicated tooling parts from SKh21 and other steel grades. If hardening is carried out in the high hardness, 1 figure.

S. V. N.

4

Card 2/2

GOL'DSRTEYN, B.G.

Increasing the durability of tools. Stan.i instr. 29 no.11:39  
N '58. (MIRA 11:11)

(Dies (Metalworking))

(Metal-cutting tools)

187100

SOV/137-59-5-11407

Translation from: Referativnyy zhurnal, Metallurgiya, 1959, No 3, p 378 (USSR)

AUTHORS Gol'dshteyn, B.G., Vinogradov, A.I.

TITLE Quench-Hardening of Carbon-Steel Instruments in Molten Salts

PERIODICAL Yaroslavl, prom-sti (Sovnarkhoz Yaroslavl, ekon. adm. r-na). 1958, Nr 6, pp 15 - 18

ABSTRACT Information is given on experience made at the "Krasnyy mayak" plant in using stepwise quench hardening of instruments made of U8 and U10, 45-50 or carburized steel in a salt bath of the following composition (in %): 53  $\text{KNO}_3$ , 40  $\text{NaNO}_2$ , 7  $\text{NaNO}$ , with addition of 2 - 3.5% water. The low operational temperature of the salt bath (110° - 125°C), vigorous stirring with an impeller, and the presence of water raise considerably the cooling rate in comparison to a salt bath having a temperature of 150° - 160°C, and ensure Fr 52 - 64 in quench-hardening U8 and U10 steel instruments of up to 60 - 100 mm in diameter or thickness. The salt bath with a salt weight of 120 - 150 kg is filled up with 0.2 1/day of water in two shift operations. To raise heretability of 12-

Card 1/2

CONFIDENTIAL

# Quench-Hardening of Carbon-Steel Instruments in Molten Salts

Instruments of large cross-sections it is recommended to harden at the hardening temperature to 820° - 840°. Impaired mechanical properties caused by coarse structure of the grains are compensated by reduced internal stresses and a higher amount of residual austenite. Compared to water quenching and quench hardening in oil and alkali solutions, the method is simple and does not require setting of holes in the instruments. It eliminates rejects caused by cracks and warping. Extended holding in the salt bath over 1 - 5 minutes has only a slight influence on the structure and hardness of steel.

1. 5

Card 2/2

GOL'DSHTEYN, B.G., inzh.

Hardening in fused slats at 110 - 125°. Metalloved.  
i term. obr. met. no. 11:62-64 N '62. (MIRA 15:11)  
(Steel--Hardening)

GOL'DSHTEYN, B.G., inzh.

Increasing the service life of deep vibrators. Stroi. i dor.mash.  
9 no.10:12-14 0 '64.  
(MIRA 18:1)

ELICHTEIN, Boris Grigor'yevich; KASITSYNA, K.M., Eds., ed.

[Pneumatic planetary vibrators] Pnevmaticheskie planetyarnyye vibratory. Moskva, Stroizdat, 1964. 21 p.  
(Data 18:7)

1. Zapravitel' nachal'nika otдела vyrobotochnykh i remontnykh mashin Vsesoyuznogo nauchno-issledovatel'skogo instituta stroitel'nogo i dorozhnogo mashinostroyeniya (for Gel'dshteyn).



Address: 401 Cambridge, N.Y.

REMARKS: The assistance in the Operation of Plant in the  
Recarbonisation or Recirculation of Water

REMARKS: [illegible]

[illegible]

Alumina is: In order to prevent precipitation of CaSO<sub>4</sub> in cooling equipment which requires addition of even larger amounts of caustic soda, recarbonation of the water is done. For this water has been adopted in the by-product plant of the Yerakiyevo Coking works. The caustic soda is done by three parallel water ejectors and is done in three stages from the soda oven main flue (see diagram). It was found that the operation of the ejectors is sufficient to obtain a degree of soda saponification of 10-15% (then 10-15 g/l of 1% - 20 ml/litre). The amount of soda saponification ejector was 15 - 20 g/l of water and 10 - 15 g/l of soda; the amount of soda saponification was 10 - 15 g/l of soda saponification. The amount of soda saponification of water in the recarbonation plant is 10 - 15 g/l of soda saponification. The amount of soda saponification of water in the recarbonation plant is 10 - 15 g/l of soda saponification.

Jan 1/2

Some of the results in the operation of the plant for the neutralization  
of residual chlorine in water

The efficiency of the plant for the neutralization of residual chlorine in water is determined by the amount of chlorine introduced into the water and the amount of chlorine removed from the water. The efficiency of the plant is determined by the amount of chlorine introduced into the water and the amount of chlorine removed from the water. The efficiency of the plant is determined by the amount of chlorine introduced into the water and the amount of chlorine removed from the water.

Author: [Name] (Yenakiyev)

Page 2/2

Influence of different diets on the enzymes of the organism. I. The problem. II. Goldshtein (*Levin Biochem. J. 7, No. 1, 79 (1941/1942)*) -- Three fundamental problems of the chemistry of enzymes are: (1) their composition and structure and the nature of their action; (2) their distribution and formation in the tissues and organs of the living organism; and (3) the role played by them in any resp. tissue. The importance of food as an instrument of research is stressed. Research on enzymes should be carried out first with a complete elimination of food, and then with a partial elimination, especially of amino acids. From the tech. point of view the enzymes investigated are divided into 3 groups: enzymes of blood, of tissues and of digestive glands. III. Insufficient consumption of proteins and the blood enzymes. II. Goldshtein. *Ibid.*, 100-23, (cf. *C. A.* 29, 4815). -- Insufficient consumption of proteins (beans, gelatin) causes in most cases a decrease in weight and death of the animal after 30-40 days. No changes are manifest with the amylase and catalase. The lipase increases, sometimes very considerably, and this runs parallel with the decrease of wt. of the animal. In some cases a decrease below the normal was observed at the approach of death of the animal. It can be assumed that the elimination of amino acids (tryptophan, cystine, tyrosine) is of little or no importance for the formation of lipase, which possibly can be used as an index of protein sufficiency.

E. E. Stefanovsky

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66  
67  
68  
69  
70  
71  
72  
73  
74  
75  
76  
77  
78  
79  
80  
81  
82  
83  
84  
85  
86  
87  
88  
89  
90  
91  
92  
93  
94  
95  
96  
97  
98  
99  
100

GOLDSHTEIN, Boris I

Influence of different diets on the enzymes of the organism. II. Starvation and blood enzymes. B. Goldshtein and K. I. Katkova. *Trudy. Biochem. J.* 7, No. 1, 95-107 (1934); *cf. C. A.* 29, 4784. - The blood catalase of rabbits shows no typical variations during starvation, the total quantity diminishing somewhat as a result of anemia. The amylase increases slightly during the first few days and falls in some cases afterwards. The lipase decreases progressively and considerably. No correlation could be established between the lipase and the decomposition of albumin in the organism. E. E. S.

ASB 3.1.1 METALLURGICAL LITERATURE CLASSIFICATION

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66  
67  
68  
69  
70  
71  
72  
73  
74  
75  
76  
77  
78  
79  
80  
81  
82  
83  
84  
85  
86  
87  
88  
89  
90  
91  
92  
93  
94  
95  
96  
97  
98  
99  
100

GOLDSHTEYN, Boris I

Influence of different diets on the enzymes of the organism. IV. Fasting and the enzymes of the tissues. B. Goldshtein and K. I. Kukova. *Ukrain Biochem Zhur* 7, No. 2, 91 (1935); cf. C. A. 29, 4784. In starved rabbits there is no alteration in the lipase (L) of liver, kidney and lung. The wt. of the liver decreases rapidly, owing to a decrease in the total quantity of tissue, and this simultaneously produces a decrease in the blood I. The amylase of the liver is not affected. V. Protein-free food and the enzymes of blood and tissues. B. Goldshtein, R. R. Sigalova and V. D. Melnichenko. *Ibid.* 1935 29. Rabbits fed on a protein-free diet live 1.5-2 months. There is no alteration in the amylase of the blood and liver, or in the I of the lung. There is a very small increase of I in the liver, and a marked increase in

the kidney. Sometimes there is an increase of I in the blood. B. C. A.

ASH S.L.A. METALLURGICAL LITERATURE CLASSIFICATION

GOLDSHTEYN, Boris I																										PROCESSES AND PROPERTIES INDEX																									
<p>Proteinases (cathepsin) in the tissues of the infantile organism with dysentery and toxic dyspepsia. B. Goldshteyn and M. Ginzburg. <i>Ukrain. Biochem. Zhur.</i> 7, No. 3-4, 147-50 (1935). The cathepsin per g of dry matter is less than normal in glycerol exts of liver, kidney and spleen of children who have died of toxic dyspepsia. B. C. A.</p>																										<p>11/2</p>																									
<p>ASH SLA METALLURGICAL LITERATURE CLASSIFICATION</p>																										<p>11/2</p>																									

GOLDSHTEYN, Boris I

Cathepsin of tissues B. Goldshtein et al.  
*Biochem Zhur B*, No. 1, 87-101 (1975) H<sub>2</sub>S, used as  
activator for cathepsin, sometimes restricts its activity.  
A weak activation or inhibition but not a strong inhibition.  
is converted into a strong activation by dilution.

03 C

PROCESSES AND PROPERTIES INDEX

2-4

Tissue proteinases in organs of animals in different stages of phylogenetic evolution. B. GOLDBERGM and E. J. MIZGALAM (Ukrain. Biochem. J. 1935, 8, No. 1, 100-103).--As regards concn. of cathepsin (I), the organs form the series: kidney > liver > spleen > muscle; and the animals the series: rat, frog, pigeon > dog, cat, hen, rabbit, guinea-pig > cow. The concn. of (I) is possibly related to the intensity of the metabolism, which decreases as body wt. increases. With mammals kidney-(I) is strongly activated, but liver-(I) is slightly inhibited or slightly activated by  $H_2S$ . With amphibia,  $H_2S$  has no action or restricts slightly the activity of liver-(I), but activates kidney-(I) slightly. With birds  $H_2S$  strongly restricts the activity of kidney-(I) and slightly that of liver-(I). The different actions of  $H_2S$  on kidney extracts are possibly due to the different end-products of protein metabolism with mammals and birds. With mammals  $H_2S$  activates spleen-(I); with frogs it greatly restricts its activity.

E. P.

ASB-ILA METALLURGICAL LITERATURE CLASSIFICATION

1935 1936 1937 1938 1939 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042 2043 2044 2045 2046 2047 2048 2049 2050 2051 2052 2053 2054 2055 2056 2057 2058 2059 2060 2061 2062 2063 2064 2065 2066 2067 2068 2069 2070 2071 2072 2073 2074 2075 2076 2077 2078 2079 2080 2081 2082 2083 2084 2085 2086 2087 2088 2089 2090 2091 2092 2093 2094 2095 2096 2097 2098 2099 2100 2101 2102 2103 2104 2105 2106 2107 2108 2109 2110 2111 2112 2113 2114 2115 2116 2117 2118 2119 2120 2121 2122 2123 2124 2125 2126 2127 2128 2129 2130 2131 2132 2133 2134 2135 2136 2137 2138 2139 2140 2141 2142 2143 2144 2145 2146 2147 2148 2149 2150 2151 2152 2153 2154 2155 2156 2157 2158 2159 2160 2161 2162 2163 2164 2165 2166 2167 2168 2169 2170 2171 2172 2173 2174 2175 2176 2177 2178 2179 2180 2181 2182 2183 2184 2185 2186 2187 2188 2189 2190 2191 2192 2193 2194 2195 2196 2197 2198 2199 2200 2201 2202 2203 2204 2205 2206 2207 2208 2209 2210 2211 2212 2213 2214 2215 2216 2217 2218 2219 2220 2221 2222 2223 2224 2225 2226 2227 2228 2229 2230 2231 2232 2233 2234 2235 2236 2237 2238 2239 2240 2241 2242 2243 2244 2245 2246 2247 2248 2249 2250 2251 2252 2253 2254 2255 2256 2257 2258 2259 2260 2261 2262 2263 2264 2265 2266 2267 2268 2269 2270 2271 2272 2273 2274 2275 2276 2277 2278 2279 2280 2281 2282 2283 2284 2285 2286 2287 2288 2289 2290 2291 2292 2293 2294 2295 2296 2297 2298 2299 2300 2301 2302 2303 2304 2305 2306 2307 2308 2309 2310 2311 2312 2313 2314 2315 2316 2317 2318 2319 2320 2321 2322 2323 2324 2325 2326 2327 2328 2329 2330 2331 2332 2333 2334 2335 2336 2337 2338 2339 2340 2341 2342 2343 2344 2345 2346 2347 2348 2349 2350 2351 2352 2353 2354 2355 2356 2357 2358 2359 2360 2361 2362 2363 2364 2365 2366 2367 2368 2369 2370 2371 2372 2373 2374 2375 2376 2377 2378 2379 2380 2381 2382 2383 2384 2385 2386 2387 2388 2389 2390 2391 2392 2393 2394 2395 2396 2397 2398 2399 2400 2401 2402 2403 2404 2405 2406 2407 2408 2409 2410 2411 2412 2413 2414 2415 2416 2417 2418 2419 2420 2421 2422 2423 2424 2425 2426 2427 2428 2429 2430 2431 2432 2433 2434 2435 2436 2437 2438 2439 2440 2441 2442 2443 2444 2445 2446 2447 2448 2449 2450 2451 2452 2453 2454 2455 2456 2457 2458 2459 2460 2461 2462 2463 2464 2465 2466 2467 2468 2469 2470 2471 2472 2473 2474 2475 2476 2477 2478 2479 2480 2481 2482 2483 2484 2485 2486 2487 2488 2489 2490 2491 2492 2493 2494 2495 2496 2497 2498 2499 2500 2501 2502 2503 2504 2505 2506 2507 2508 2509 2510 2511 2512 2513 2514 2515 2516 2517 2518 2519 2520 2521 2522 2523 2524 2525 2526 2527 2528 2529 2530 2531 2532 2533 2534 2535 2536 2537 2538 2539 2540 2541 2542 2543 2544 2545 2546 2547 2548 2549 2550 2551 2552 2553 2554 2555 2556 2557 2558 2559 2560 2561 2562 2563 2564 2565 2566 2567 2568 2569 2570 2571 2572 2573 2574 2575 2576 2577 2578 2579 2580 2581 2582 2583 2584 2585 2586 2587 2588 2589 2590 2591 2592 2593 2594 2595 2596 2597 2598 2599 2600 2601 2602 2603 2604 2605 2606 2607 2608 2609 2610 2611 2612 2613 2614 2615 2616 2617 2618 2619 2620 2621 2622 2623 2624 2625 2626 2627 2628 2629 2630 2631 2632 2633 2634 2635 2636 2637 2638 2639 2640 2641 2642 2643 2644 2645 2646 2647 2648 2649 2650 2651 2652 2653 2654 2655 2656 2657 2658 2659 2660 2661 2662 2663 2664 2665 2666 2667 2668 2669 2670 2671 2672 2673 2674 2675 2676 2677 2678 2679 2680 2681 2682 2683 2684 2685 2686 2687 2688 2689 2690 2691 2692 2693 2694 2695 2696 2697 2698 2699 2700 2701 2702 2703 2704 2705 2706 2707 2708 2709 2710 2711 2712 2713 2714 2715 2716 2717 2718 2719 2720 2721 2722 2723 2724 2725 2726 2727 2728 2729 2730 2731 2732 2733 2734 2735 2736 2737 2738 2739 2740 2741 2742 2743 2744 2745 2746 2747 2748 2749 2750 2751 2752 2753 2754 2755 2756 2757 2758 2759 2760 2761 2762 2763 2764 2765 2766 2767 2768 2769 2770 2771 2772 2773 2774 2775 2776 2777 2778 2779 2780 2781 2782 2783 2784 2785 2786 2787 2788 2789 2790 2791 2792 2793 2794 2795 2796 2797 2798 2799 2800 2801 2802 2803 2804 2805 2806 2807 2808 2809 2810 2811 2812 2813 2814 2815 2816 2817 2818 2819 2820 2821 2822 2823 2824 2825 2826 2827 2828 2829 2830 2831 2832 2833 2834 2835 2836 2837 2838 2839 2840 2841 2842 2843 2844 2845 2846 2847 2848 2849 2850 2851 2852 2853 2854 2855 2856 2857 2858 2859 2860 2861 2862 2863 2864 2865 2866 2867 2868 2869 2870 2871 2872 2873 2874 2875 2876 2877 2878 2879 2880 2881 2882 2883 2884 2885 2886 2887 2888 2889 2890 2891 2892 2893 2894 2895 2896 2897 2898 2899 2900 2901 2902 2903 2904 2905 2906 2907 2908 2909 2910 2911 2912 2913 2914 2915 2916 2917 2918 2919 2920 2921 2922 2923 2924 2925 2926 2927 2928 2929 2930 2931 2932 2933 2934 2935 2936 2937 2938 2939 2940 2941 2942 2943 2944 2945 2946 2947 2948 2949 2950 2951 2952 2953 2954 2955 2956 2957 2958 2959 2960 2961 2962 2963 2964 2965 2966 2967 2968 2969 2970 2971 2972 2973 2974 2975 2976 2977 2978 2979 2980 2981 2982 2983 2984 2985 2986 2987 2988 2989 2990 2991 2992 2993 2994 2995 2996 2997 2998 2999 3000 3001 3002 3003 3004 3005 3006 3007 3008 3009 3010 3011 3012 3013 3014 3015 3016 3017 3018 3019 3020 3021 3022 3023 3024 3025 3026 3027 3028 3029 3030 3031 3032 3033 3034 3035 3036 3037 3038 3039 3040 3041 3042 3043 3044 3045 3046 3047 3048 3049 3050 3051 3052 3053 3054 3055 3056 3057 3058 3059 3060 3061 3062 3063 3064 3065 3066 3067 3068 3069 3070 3071 3072 3073 3074 3075 3076 3077 3078 3079 3080 3081 3082 3083 3084 3085 3086 3087 3088 3089 3090 3091 3092 3093 3094 3095 3096 3097 3098 3099 3100 3101 3102 3103 3104 3105 3106 3107 3108 3109 3110 3111 3112 3113 3114 3115 3116 3117 3118 3119 3120 3121 3122 3123 3124 3125 3126 3127 3128 3129 3130 3131 3132 3133 3134 3135 3136 3137 3138 3139 3140 3141 3142 3143 3144 3145 3146 3147 3148 3149 3150 3151 3152 3153 3154 3155 3156 3157 3158 3159 3160 3161 3162 3163 3164 3165 3166 3167 3168 3169 3170 3171 3172 3173 3174 3175 3176 3177 3178 3179 3180 3181 3182 3183 3184 3185 3186 3187 3188 3189 3190 3191 3192 3193 3194 3195 3196 3197 3198 3199 3200 3201 3202 3203 3204 3205 3206 3207 3208 3209 3210 3211 3212 3213 3214 3215 3216 3217 3218 3219 3220 3221 3222 3223 3224 3225 3226 3227 3228 3229 3230 3231 3232 3233 3234 3235 3236 3237 3238 3239 3240 3241 3242 3243 3244 3245 3246 3247 3248 3249 3250 3251 3252 3253 3254 3255 3256 3257 3258 3259 3260 3261 3262 3263 3264 3265 3266 3267 3268 3269 3270 3271 3272 3273 3274 3275 3276 3277 3278 3279 3280 3281 3282 3283 3284 3285 3286 3287 3288 3289 3290 3291 3292 3293 3294 3295 3296 3297 3298 3299 3300 3301 3302 3303 3304 3305 3306 3307 3308 3309 3310 3311 3312 3313 3314 3315 3316 3317 3318 3319 3320 3321 3322 3323 3324 3325 3326 3327 3328 3329 3330 3331 3332 3333 3334 3335 3336 3337 3338 3339 3340 3341 3342 3343 3344 3345 3346 3347 3348 3349 3350 3351 3352 3353 3354 3355 3356 3357 3358 3359 3360 3361 3362 3363 3364 3365 3366 3367 3368 3369 3370 3371 3372 3373 3374 3375 3376 3377 3378 3379 3380 3381 3382 3383 3384 3385 3386 3387 3388 3389 3390 3391 3392 3393 3394 3395 3396 3397 3398 3399 3400 3401 3402 3403 3404 3405 3406 3407 3408 3409 3410 3411 3412 3413 3414 3415 3416 3417 3418 3419 3420 3421 3422 3423 3424 3425 3426 3427 3428 3429 3430 3431 3432 3433 3434 3435 3436 3437 3438 3439 3440 3441 3442 3443 3444 3445 3446 3447 3448 3449 3450 3451 3452 3453 3454 3455 3456 3457 3458 3459 3460 3461 3462 3463 3464 3465 3466 3467 3468 3469 3470 3471 3472 3473 3474 3475 3476 3477 3478 3479 3480 3481 3482 3483 3484 3485 3486 3487 3488 3489 3490 3491 3492 3493 3494 3495 3496 3497 3498 3499 3500 3501 3502 3503 3504 3505 3506 3507 3508 3509 3510 3511 3512 3513 3514 3515 3516 3517 3518 3519 3520 3521 3522 3523 3524 3525 3526 3527 3528 3529 3530 3531 3532 3533 3534 3535 3536 3537 3538 3539 3540 3541 3542 3543 3544 3545 3546 3547 3548 3549 3550 3551 3552 3553 3554 3555 3556 3557 3558 3559 3560 3561 3562 3563 3564 3565 3566 3567 3568 3569 3570 3571 3572 3573 3574 3575 3576 3577 3578 3579 3580 3581 3582 3583 3584 3585 3586 3587 3588 3589 3590 3591 3592 3593 3594 3595 3596 3597 3598 3599 3600 3601 3602 3603 3604 3605 3606 3607 3608 3609 3610 3611 3612 3613 3614 3615 3616 3617 3618 3619 3620 3621 3622 3623 3624 3625 3626 3627 3628 3629 3630 3631 3632 3633 3634 3635 3636 3637 3638 3639 3640 3641 3642 3643 3644 3645 3646 3647 3648 3649 3650 3651 3652 3653 3654 3655 3656 3657 3658 3659 3660 3661 3662 3663 3664 3665 3666 3667 3668 3669 3670 3671 3672 3673 3674 3675 3676 3677 3678 3679 3680 3681 3682 3683 3684 3685 3686 3687 3688 3689 3690 3691 3692 3693 3694 3695 3696 3697 3698 3699 3700 3701 3702 3703 3704 3705 3706 3707 3708 3709 3710 3711 3712 3713 3714 3715 3716 3717 3718 3719 3720 3721 3722 3723 3724 3725 3726 3727 3728 3729 3730 3731 3732 3733 3734 3735 3736 3737 3738 3739 3740 3741 3742 3743 3744 3745 3746 3747 3748 3749 3750 3751 3752 3753 3754 3755 3756 3757 3758 3759 3760 3761 3762 3763 3764 3765 3766 3767 3768 3769 3770 3771 3772 3773 3774 3775 3776 3777 3778 3779 3780 3781 3782 3783 3784 3785 3786 3787 3788 3789 3790 3791 3792 3793 3794 3795 3796 3797 3798 3799 3800 3801 3802 3803 3804 3805 3806 3807 3808 3809 3810 3811 3812 3813 3814 3815 3816 3817 3818 3819 3820 3821 3822 3823 3824 3825 3826 3827 3828 3829 3830 3831 3832 3833 3834 3835 3836 3837 3838 3839 3840 3841 3842 3843 3844 3845 3846 3847 3848 3849 3850 3851 3852 3853 3854 3855 3856 3857 3858 3859 3860 3861 3862 3863 3864 3865 3866 3867 3868 3869 3870 3871 3872 3873 3874 3875 3876 3877 3878 3879 3880 3881 3882 3883 3884 3885 3886 3887 3888 3889 3890 3891 3892 3893 3894 3895 3896 3897 3898 3899 3900 3901 3902 3903 3904 3905 3906 3907 3908 3909 3910 3911 3912 3913 3914 3915 3916 3917 3918 3919 3920 3921 3922 3923 3924 3925 3926 3927 3928 3929 3930 3931 3932 3933 3934 3935 3936 3937 3938 3939 3940 3941 3942 3943 3944 3945 3946 3947 3948 3949 3950 3951 3952 3953 3954 3955 3956 3957 3958 3959 3960 3961 3962 3963 3964 3965 3966 3967 3968 3969 3970 3971 3972 3973 3974 3975 3976 3977 3978 3979 3980 3981 3982 3983 3984 3985 3986 3987 3988 3989 3990 3991 3992 3993 3994 3995 3996 3997 3998 3999 4000 4001 4002 4003 4004 4005 4006 4007 4008 4009 4010 4011 4012 4013 4014 4015 4016 4017 4018 4019 4020 4021 4022 4023 4024 4025 4026 4027 4028 4029 4030 4031 4032 4033 4034 4035 4036 4037 4038 4039 4040 4041 4042 4043 4044 4045 4046 4047 4048 4049 4050 4051 4052 4053 4054 4055 4056 4057 4058 4059 4060 4061 4062 4063 4064 4065 4066 4067 4068 4069 4070 4071 4072 4073 4074 4075 4076 4077 4078 4079 4080 4081 4082 4083 4084 4085 4086 4087 4088 4089 4090 4091 4092 4093 4094 4095 4096 4097 4098 4099 4100 4101 4102 4103 4104 4105 4106 4107 4108 4109 4110 4111 4112 4113 4114 4115 4116 4117 4118 4119 4120 4121 4122 4123 4124 4125 4126 4127 4128 4129 4130 4131 4132 4133 4134 4135 4136 4137 4138 4139 4140 4141 4142 4143 4144 4145 4146 4147 4148 4149 4150 4151 4152 4153 4154 4155 4156 4157 4158 4159 4160 4161 4162 4163 4164 4165 4166 4167 4168 4169 4170 4171 4172 4173 4174 4175 4176 4177 4178 4179 4180 4181 4182 4183 4184 4185 4186 4187 4188 4189 4190 4191 4192 4193 4194 4195 4196 4197 4198 4199 4200 4201 4202 4203 4204 4205 4206 4207 4208 4209 4210 4211 4212 4213 4214 4215 4216 4217 4218 4219 4220 4221 4222 4223 4224 4225 4226 4227 4228 4229 4230 4231 4232 4233 4234 4235 4236 4237 4238 4239 4240 4241 4242 4243 4244 4245 4246 4247 4248 4249 4250 4251 4252 4253 4254 4255 4256 4257 4258 4259 4260 4261 4262 4263 4264 4265 4266 4267 4268 4269 4270 4271 4272 4273 4274 4275 4276 4277 4278 4279 4280 4281 4282 4283 4284 4285 4286 4287 4288 4289 4290 4291 4292 4293 4294 4295 4296 4297 4298 4299 4300 4301 4302 4303 4304 4305 4306 4307 43



GOLDSHTEYN, Boris I

Cathepsin in the embryo and in maternal tissues. I  
B. Goldshteyn and K. I. Migram. *Trav. Rus. Akad. Nauk*, No. 1, 130-135 (1955). The difference between the  
amts. of activated (I) and nonactivated (II) cathepsin  
increases in the maternal organs during (and possibly  
parallel with) the growth of the embryo. In the placenta  
the value of II is very low; the difference between the  
amts. of I and II is very great in rat, less in rabbit and  
guinea pig and very low in human placenta. The concn  
of I and II in the embryo is low and increases with the  
growth. After birth the concn increases, being greater  
than in the corresponding maternal organs. After reach-  
ing a max. it falls to the normal value. The difference  
between the amts. of I and II increases rapidly. Thus the  
protein metabolism of the embryo is controlled by the  
maternal organs and by the placenta. The difference  
between the amts. of I and II increases parallel with the  
synthesis action.

B. C. A.

GOLDSHTEYN, Boris I

Tissue proteases (cathepsin) in protein deficiency. Boris Goldshtein and M. Gintsburg. *Ukrain. Biokhim. Zhur.* 6, 341-4 (in Russian 348-53, in German 353-4) (1930); cf. *C. A.* 30, 6342; cf. *Ukrain. Biokhim. Zhur.* VII, No. 1 (1932); VIII, No. 3; VII, No. 3 (1934).—The concn. of cathepsin in rabbit liver and kidneys is higher than normal in protein deficiency. The difference between cathepsin unactivated and activated with H<sub>2</sub>S also is much increased, especially in the liver. It is concluded that when protein synthesis predominates over hydrolysis, a considerable activating action of SH groups of the cathepsin takes place, and, that when hydrolysis predominates, there is a depressing action. Protein synthesis in rabbit liver is obviously increased on a deficient protein diet.

B. P. Stefanovsky

AS4-55A METALLURGICAL LITERATURE CLASSIFICATION

FROM SYNONYMS

SENDED #

LA

AV

NO

AI

LA

AV

NO

AI

LA

AV

NO

AI

LA

AV

NO

AI

LA

AV

NO

AI

LA

AV

NO

AI

LA

AV

NO

AI

LA

AV

NO

AI

LA

AV

NO

AI

LA

AV

NO

AI

LA

AV

NO

AI

LA

AV

NO

AI

LA

AV

NO

AI

LA

AV

NO

AI

LA

AV

NO

AI

LA

AV

NO

AI

LA

AV

NO

AI

LA

AV

NO

AI

LA

AV

NO

AI

LA

AV

NO

AI

LA

AV

NO

AI

GOLDSHTAYN, Boris I

Proteinases (cathepsin) in tissues of the hen embryo  
B. Goldshteyn and M. Gintsburg. *Ukrain. Biochem.  
Zhur.* 9, 543-546 (in Russian 500 001, in German 642) (1961)  
-The catheptic action of glycerol exts. from embryonal  
membranes on gelatin becomes evident on the 9th day of  
incubation. Highest values of the proteolytic action are  
attained speedily and are maintained at about the same  
level until the last days of incubation. The difference of  
unactivated cathepsin and that activated by H<sub>2</sub>S in the  
exts. investigated is great, especially in the first days of its  
appearance. The cathepsin values and the character of  
the activating action of H<sub>2</sub>S are similar to those observed  
with placenta cathepsin R. E. Stefanovsky

ADN 554 METABOLICAL LITERATURE CLASSIFICATION

GOLDSHTEYN, Boris I

The problem of specificity of tissue proteinase cathepsin. B. Goldshteyn and E. Yu. Molgram. *Enzyme* 1967, 10, 207-82 in Russian, 282-3, in German (286) (1967). The cathepsin of kidneys, liver and muscle hydrolyzes the albuminous matter of its own organs much more than gelatin. The intensities of gelatin hydrolysis by cathepsins of different organs are different; the cathepsin of the liver and kidneys hydrolyzes not only albumin of the same organs, but also gelatin and that of muscle hydrolyzes only brown albumin and has almost no effect on gelatin. These results are closely connected with the specificity of different organ cathepsins, which is more distinct in the muscle cathepsin than in that of the liver and kidneys. E. I. Stefanovsky.

AS 354 RETAIL LITERATURE CLASSIFICATION

EN 5 1967

EN 5 1967

GOLDSHTEYN, Boris I

Ca

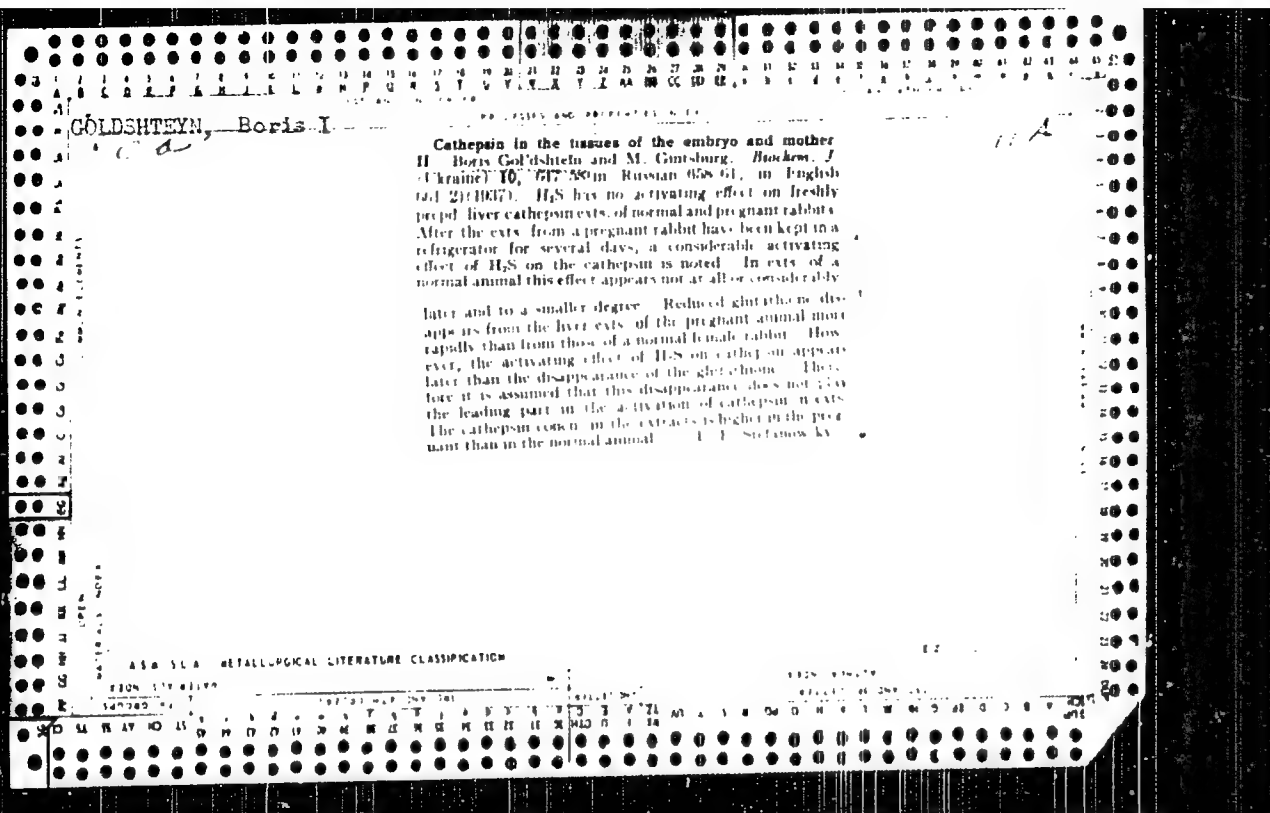
11 F

Glutathione and its state in normal and tumor bearing tissues of animals. Boris Goldshtein and M. I. Kolesnikovs. *Ukrain. Biokhem. Zh.* 10, 471-480, 1966 (in Russian 497, 500, 516-20, in English 521, 1967). The glutathione content in rat tissues computed for dry matter decreases in the order: kidneys, peripheral tissue of liver, rat sarcoma, liver, spleen. In some cases the content in the liver of rats bearing the hepatoma is lower than in the liver of normal rats. The content of glutathione in fresh matter, thus, however, was not the same in all cases. Sometimes even the reverse was found. This fact depends on the decrease of the dry residue in the liver of sarcomatous rats. A relatively slow oxidation of glutathione was shown by the sarcomatous tissue and spleen under aeration; the oxidation going only to a small limit and then ceasing. The total glutathione content decreased very slowly, contrary to the liver tissue. Practically no decrease could be discovered after 18 hrs. of aeration. Its oxidation and destruction in the liver of sarcomatous rats is more rapid than in that of normal animals. Its content and rate seem to be considerably affected by the season; a more rapid oxidation taking place in winter than in summer. R. B. Sedgewick.

ASB S.L.A. METALLOGICAL LITERATURE CLASSIFICATION



GOLDSSTEIN, Boris I		A-4	
<p><b>Ascorbic acid in tissues of normal and tumour-bearing animals.</b> B. GOLDSSTEIN and D. VOLKOVICH (Ukrain. Biochem. J. 1937, 10, 551-558).-- The amounts of ascorbic acid in the dried tissues of the rat are in the descending order healthy peripheral tissue of Jensen's sarcoma, spleen, liver, kidney. The amount of ascorbic acid in the spleen of sarcoma-bearing rats is greater than that of normal animals. With aeration of normal liver, decrease in the amount of reduced ascorbic acid begins after 3-4 hr., whilst oxidation in the kidney takes place more quickly. In the spleen, decrease in the reduced form occurs only after 18 hr. aeration. In healthy tissue of Jensen rat sarcoma, decrease in ascorbic acid is rapid after 2-3 hr. aeration, but soon ceases. Oxidation of ascorbic acid in liver of sarcoma-bearing rats begins earlier and is more rapid than in liver of normal rats. The season influences the content and state of ascorbic acid in normal and sarcomatous tissue, the amount in winter being much greater than that in summer. A mechanism probably exists in the animal to keep glutathione and ascorbic acid in the reduced states and protect them from oxidation, whilst glutathione helps to stabilize reduced ascorbic acid. J. N. A.</p>			
<p>ASS 51 A METALLURGICAL LITERATURE CLASSIFICATION</p>			
<p>RECORD # 1</p>			







GOLDSHTEYN, Boris I

Specificity of tissue proteinases (cathepsins). [Rus].  
Goldshchep. *Enzymologia* 2, 131-132 (1965), ref. 1, p. 31, 7155. The cathepsin of liver, kidney or muscle of various animals has a greater proteolytic action on the proteins of the parent tissue than on gelatin. The specificity of a cathepsin with gelatin, caseinogen or ovalbumin as substrate generally decreases as the animal yielding the enzyme descends the evolutionary series is influenced by change in physiological condition, e.g., pregnancy of the animal and is partly dependent on a thermolabile co-enzyme called calicarpin. [Rus, Lit. A]

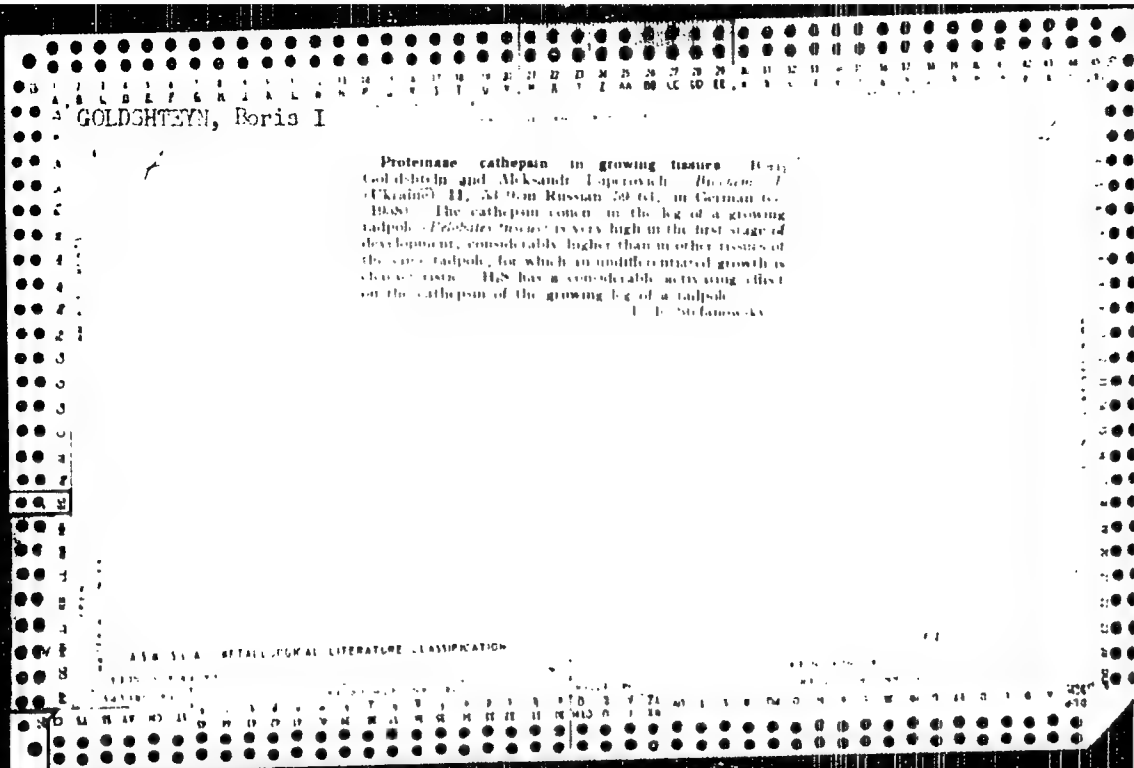
50 31 A METAL-POPUL LITERATURE CLASSIFICATION

GOUDREAU, E.I.

Oxidation of ascorbic acid in normal living tissue and the tissue of malignant tumors. E.I. GOUDREAU AND D.V. VOLKOVICH (LIONEN. I.P., DEPT. OF EXPERIMENTAL MEDICINE AND BIOLOGY, ALEX ROITGEN- BIOLOGICAL INSTITUTE) vol.3, no.2, p.356, 1936.

GOLDSHTIEN, P.I.

The effect of heavy metals on the oxidation of ascorbic acid  
in the normal animal tissues and in the tissues of malignant tumors.  
P.I. GOLDSHTIEN AND V. VOL'KOV. (BIOCHEMICAL LABORATORY, DEPT OF EXPERIMENTAL  
MEDICINE AND BIOLOGY, INST. OF ROENTGENOLOGY AND RADIOLOGY, KIEV) vol.3, no.4,  
1966, 1938.



GOLDSHTEYN, Boris I

Proteins (cathpsin) in tissues of a chick embryo  
H. Boris Goldshstein and M. Gintzburg. *Biochem. J.*  
(Kram) 11, 65-70 (in Russian); 70, 10 (German); 11  
(1958), cf. C. A. 31, 3127, 3972. During the develop-  
ment of the embryo cathpsin forms in the yolk sack,  
it is evidently absent from the yolk, the amnion and  
the allantoic fluid. The cathpsin of the embryonic  
membrane of an egg has a great hydrolytic effect on the  
yolk and specifically toward albumen and gelatin in  
the white of the egg, whereas, the cathpsin of the organs  
of mammals has no hydrolytic effect on these com-  
pounds.

U. S. S. R. Academy of Sciences

ASACSLA METALLOGRAPHIC LITERATURE CLASSIFICATION

BC

**Specificity of tissue proteinases (cathepsins).**  
B. GOLDSBERG, M. GINSBURG, and E. MILONAN  
(Ukraine. Biochem. J., 1968, 11, 337-350).—Nekin,  
dog, rabbit, and pigeon liver cathepsins do not  
hydrolyse ovalbumin, addition of which to the ex-  
tracts prevents autolysis of the homologous tissue  
proteinase, as a result of formation of stable ovalbumin-  
cathepsin complexes. The rate of production of NH<sub>2</sub>-  
acids in rat, horse, and chicken liver extracts is un-  
affected by addition of ovalbumin, showing that these  
cathepsins have a feeble action on this substrate.  
The rate of NH<sub>2</sub>-acid production from ovalbumin  
rises in the series comp. < hen < *Gallus domesticus*  
< *C. mele* < chick < frog < adder < eel < shark <  
skate < axolotl < chick embryo yolk sac cathepsins.  
It is concluded that the higher is a given point in the  
evolutionary scale, the greater is the specificity of its  
tissue proteinases. Physiological changes in the  
animal affect the specificity of cathepsins; thus liver  
cathepsin from pregnant rabbits hydrolyses oval-  
bumin. The same property is conferred on ordinary  
rabbit liver cathepsin by addition of heat-inactivated  
yolk sac cathepsin. R. T.

ASH:SLA METALLURGICAL LITERATURE CLASSIFICATION

GOLDSHTEYN, Boris I

The relation between ascorbic acid and liver lipase.  
Boris I. Goldshiteyn and S. P. Bondareva. *Biochem*  
X (Kriano) 12, 91-94 in Russian, 1947, in English,  
1949 (1951). The prep used was a suspension of rat  
liver in phosphate buffer. The lipolytic activity was  
followed after varying periods 2, 4, 6 and 8 hrs. of oxera-  
tion. A considerable decrease in the reduced form of ascorbic  
acid was obtained, but only a comparatively  
insignificant and inconsistent decrease in lipolytic ac-  
tivity. When the expt. was repeated in the presence of  
active ascorbic acid oxidase (cabbage juice), the reduction  
in lipolytic activity was great and consistent. Ascorbic  
acid was almost completely oxidized. Conclusion  
There is a relation between reduced ascorbic acid and liver  
lipase, although this relation is not as yet clear. R. L.

AS 8-31.4 METALLURGICAL LITERATURE CLASSIFICATION

4304 17V 01/10

147087 41 72



GOLDSHTEN, Boris I.

Liver lipase and fat in growing organisms. *Bull. Acad. Sci. USSR Div. Biol. Sci. (Environ. Biol.)* 1968, 12, 279-280. In English. (Abstract) In addition, the fat content of the liver varies inversely with its lipase activity, the general tendency being for the former to fall, and the latter to rise, with increasing age. Absorption changes are noted on the 2nd and 18-20th days of extrauterine life. B. C. P. A.

GOLDSHTEYN, Boris I

Cathepsin and glutathione in the liver of normal rabbits and in hyperthyroidism. Boris Gol'dshiteyn, M. Gintskan, and G. Sheves. *Biochem. J.* (Ukraine) 12, 385-401 in Russian, 401-6; in English, 407-11 (1948).- The cathepsin activity of exs. of the liver of rabbits fed with thyroid gland is greater than in normal rabbits. H<sub>2</sub>S lowers the activity of fresh exs., to a greater extent in the former than in the latter group. The activity of the exs. falls with time, and such exs. are then activated by H<sub>2</sub>S, to a greater extent in thyroid-fed animals; this effect is not paralleled by disappearance of reduced glutathione from the exs. The presence of activators of cathepsin other than glutathione is postulated. B. C. P. A.

16

GOLDSTEIN, Boris I.

A study of the possibility of applying animal cereals for saccharification of grain-potato mashers. Boris I. Goldstein, Mark G. Goldenberg and Olga S. Sklyarska. *Moscow. J. Ukrainer* 12, 573-580 in Russian, 1968, in English, 580-600 (1968). It was found that by using 4% malt and a 0.01% prepn. from swine pancreas, the ab- output was almost the same as if 8% malt were used. The authors recommend the use of this pancreatic ext. to save the expenditure of malt. The cost of the production would be thereby considerably reduced. R. Levine

ASA-5LA METALLURGICAL LITERATURE CLASSIFICATION

GOLDSHTEYN, Boris I.

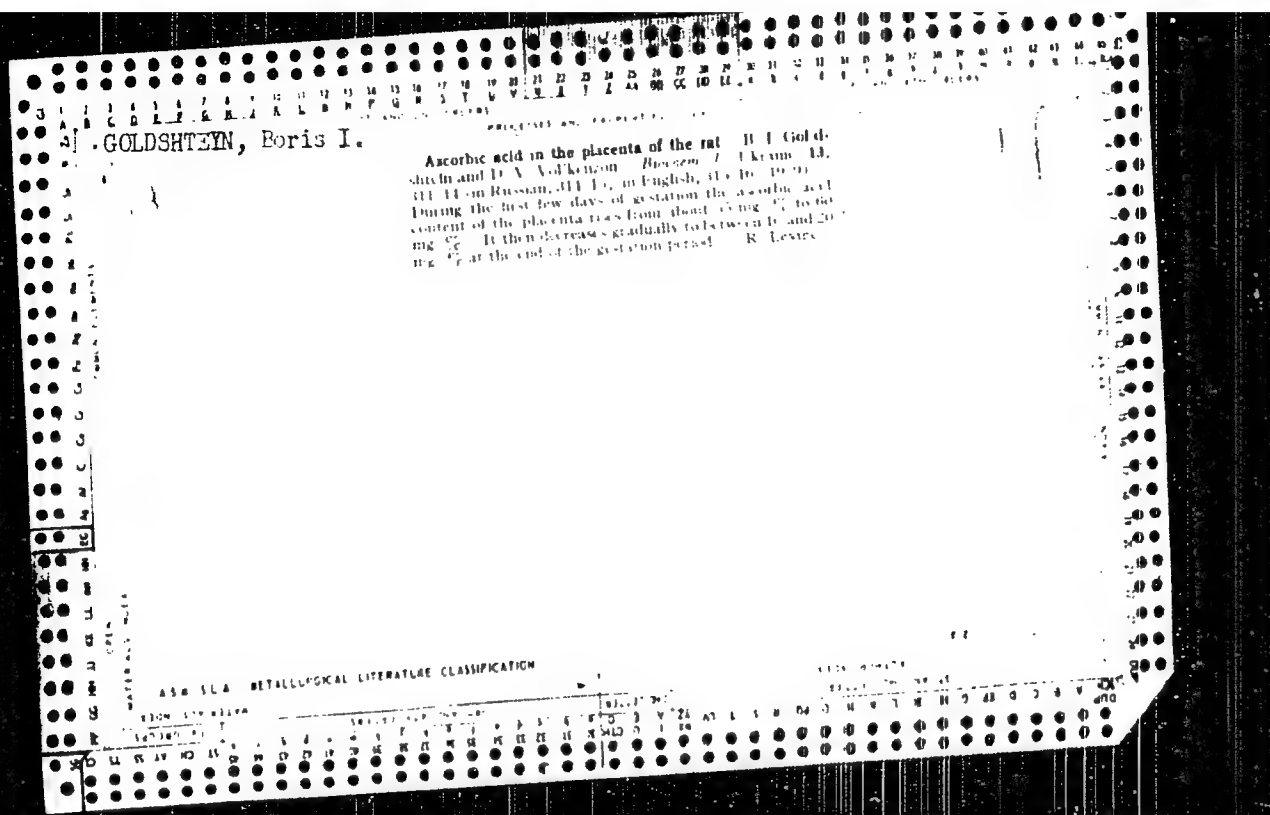
Mechanism of aerobic acid oxidation in animal tissue.  
B. I. Goldshteyn and D. V. Volynson. *Bull. Acad. Sci. USSR Div. Chem. Biol.* 4, 157 (1970). (U.S.S.R., 1971). Ascorbic acid is oxidized in liver and kidney, but not in liver, kidney or adrenals of rats, and in the presence of peroxidase and hydrogen peroxide. Addition of H<sub>2</sub>O<sub>2</sub> to peroxidase solution results in formation of a color and the rate of oxidation of ascorbic acid. The action of ascorbic acid in the presence of both H<sub>2</sub>O<sub>2</sub> and peroxidase are added. Ascorbic acid in liver and kidney tissue is not oxidized by H<sub>2</sub>O<sub>2</sub> and peroxidase. H. P. P. P. P.

*Beckman and Dept. of Chemistry*

ASA 55.6 METALLURGICAL LITERATURE CLASSIFICATION

GOLDSHTEYN, Boris I.

Method for the determination of the glutathione content of tissues. B. I. Goldshstein, M. I. Kolesnits and P. G. Knyshenko. *J. Biochem. Ukraine* 13: 119-27 in Russian, 128-32, in English, 1-2 of 1990. It was shown that in certain tissues (liver, spleen) heating at 50-55° for 30 min, after protein precipitation, led to the complete oxidation of the ascorbic acid present. This was due to a reaction involving the presence of ferrous iron. To other tissues iron had to be added in order to oxidize the ascorbic acid by this method. The glutathione, not oxidized by this procedure, was determined by the titration before and after oxidation of the ascorbic acid.



GOLDHSTEYN, Boris I.

DA

11F

Comparison of the lipolytic activity of sulfate and acetone preparations of rabbit liver. B. I. Goldshteyn and E. S. El'vashkevich. *Biochem. J. (Ukraine)* 13, 539-57, in Russian, 567-71; in English, 571-4; (1930). In connection with the work on the relation between the liver lipase and fat in growing rabbits (C. I. 33, 78508), J. Needham's method employed with his work on organisms (C. I. 28, 2418) was divided upon to dehydrate the tissue without removing the fat. The liver, washed in physiologic soln. and dried with filter paper, was minced with scissors and mixed with 3 times its wt.  $\text{Na}_2\text{SO}_4$  and placed over  $\text{CaCl}_2$ . From 2 to 4 g. of fresh liver equiv. was taken for each expt. The conditions of synthesis varied for different expts., but were the same for acetone ether (I) and sulfate (II) preps. Controls to det. the possible activating sulfate influence showed no such influence. The synthesis ratio of I to II is 1 to 3.3-5.5 for rabbits 12-45 days old, approaching that of adults. No coeff. could be derived for newborn to 1-2-day-old animals, whose fat-rich liver gave zero synthesis and hydrolysis value for I, but remarkably high II, 6.3-14%. The hydrolytic lipase activity of II of young animals equals that of fresh tissue. B. Gutloff

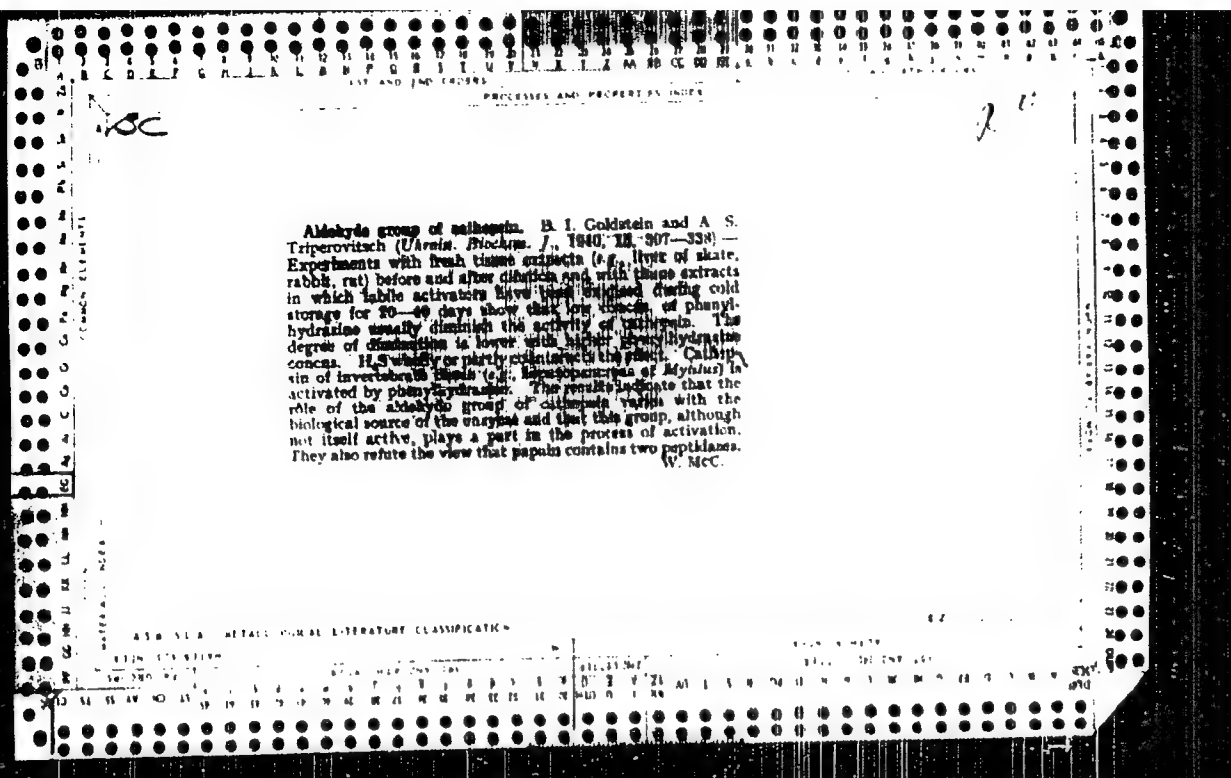
GOLDSHTEYN, Boris I.

Effect of iron on oxidation of ascorbic acid in animal tissue. Ascorbic acid is oxidized to dehydroascorbic acid (DHA) in animal tissue. This oxidation is a complex process involving autoxidation and the formation of a complex with iron. The rate of oxidation is limited by the concentration of iron in the tissue. This oxidation is reversible, and it is suggested that in growing tissues of tumor, tumor growth might be inhibited by substituting a suitable iron complex, e.g., pyridoxal, for iron in the tumor.

BIOCHEMICAL LABORATORY, DEPT., OF EXPERIMENTAL MEDICINE AND BIOLOGY,  
INSTITUTE OF ROENTGENOLOGY AND RADIOLOGY, KIEV

ASB-SEA METALLURGICAL LITERATURE CLASSIFICATION





11F

GOLDSHTEYN, Boris I.

Interrelationships between glutathione and ascorbic acid in animal tissues. B. I. Goldshteyn and S. A. Kachorova. *Russk. J. of Chem.* 16, No. 1, 24 (1940). Russian, 45 b., in English, 50 (1940). Adding 15% to the tissue without aeration has no immediate effect on the glutathione (G) or ascorbic acid (A), Fe<sup>2+</sup> causes an instantaneous and abrupt oxidation of G, and the no. of Fe ions required is several times the theoretical. Fe is oxidized only after the complete oxidation of G. Na<sub>2</sub>PO<sub>4</sub> and Na<sub>2</sub>P<sub>2</sub>O<sub>7</sub> inhibit G oxidation in aeration, and in the presence of Fe. The action is connected with the formation of complex compounds of Fe with the mineral, "marked" Fe.

B. Gutloff

ALPHABETIC INDEX																									
A-Z													A-Z												
GOLDSTEIN, Boris I.																									
<p><b>Mechanism of ascorbic acid oxidation in the tissues of the animal organism in an acid medium</b> B. I. Goldstein and P. G. Kuznetsov. <i>Russkaya J. (Kraev)</i> 10, No. 1, 67 (1940). Russian, 40 (6), in English, 30 (1) (1940).</p> <p>The ascorbic acid (I) of liver and spleen tissues of rat is completely oxidized in warm 2% sulfosalicylic acid solution in 0.5 hr., in the spring and summer months, its rate of oxidation is much slower in exts. of kidneys and malignant neoplasm of rat sarcoma (III), resp., it is also slower during the fall and winter months. Warming II ext. of III in the presence of a similar ext. of liver speeds up the oxidation. Addn. of <math>Fe^{2+}</math> (0.1 mg. g. of tissue) causes complete oxidation of all the tissue exts. on warming. A similar, but less energetic effect is produced by <math>Cu^{2+}</math>. In II and in <math>CCl_3COOH</math> <math>Fe^{2+}</math> is more active on I of lemon juice, in citric acid and <math>HCl</math> <math>Cu^{2+}</math> is more active, at pH = 1.1 is more active, at pH = 5.5, <math>Cu^{2+}</math> Reference: B. Gold-</p>																									
<p>ASAC-SLA METALLURGICAL LITERATURE CLASSIFICATION</p> <p>1000 000000</p>																									

GOLDSHTEYN, Boris I.

118

The synthetic action of papain. B. I. Goldshtein and  
 V. S. Tsiprovich. *Biochim. J.* 1954, 16, 1078.  
 in Russian, 1954, in English, vol. 2, part 1. Acti-  
 vated papain causes both hydrolytic and synthetic  
 peptide bonds simultaneously at pH = 4.7. The pp-  
 formed probably belongs to the group of phos-  
 The  $\alpha$ , in contrast to peptones and proteoses, an mol in  
 HCl, contain much less free  $\text{NH}_2$  total N, show higher ex-  
 tinction rate of the buret reaction, indicating a greater  
 peptide bonds, and are hydrolyzed by papain. HCl, and  
 mol. On inhibit the effect of the enzyme. Inhibiting inactivates,  
 and it retards it; 1 cc. of a 0.6 papain soln. was added  
 to a 20% peptone soln. at 37°. The hydrolytic activity  
 was died, after adding cysteine-HCl, 1.5 mg. 1 cc. of re-  
 acting mixt., and, keeping for 20-40 hrs., according to Will-  
 Slyke for increase in free  $\text{NH}_2$ , and according to Will-  
 starter and Wadsworth-Lentz for  $\text{COOH}$  groups, the N  
 ppd. by  $\text{CCl}_3\text{COOH}$  is decreased, and this acid could not  
 be used in the detn. of the synthetic activity. B. Golsh-  
 tein.

ASB 51.4 METABOLICAL LITERATURE CLASSIFICATION

GOLDSHTEIN, Boris I

Fermentative mechanism of infection of wheat by *Eurygaster intergriceps* Put. and its control in bread baking. B. I. Goldshtein, V. Yu. Gorbachevskaya and O. S. Shlovskaya. *Biochem. J. Ukraine* 16, No. 2, 193-203; in Russian (in English, 205-1940). The damage is done by the insect (I) to the wheat gluten (II), which becomes stringy and loses its elasticity. The indications of increase of proteolytic enzyme (III) activity lead to the conclusion that that enzyme is introduced by I with the bite. Expts. with normal and infected grain and with II and gelatin showed that in the reduction of total N and the increase in sol. N, N pptd. by 2.5%  $\text{CCl}_3\text{COOH}$  (IV), free and peptide tyrosine (not pptd. by IV), amylolytic and proteolytic activity of  $\text{H}_2\text{O}$  exts. of the grain and considerable increase of tyrosinase, the behavior of III resembles that of rennin. The actions of trypsin, pepsin and papain on these proteins were different in nature. The process of degradation of II appears similar to the coagulation of milk by the same enzymes. Addn. of 2.5% of NaCl, on the wt. of the flour, or 0.5% of anhyd.  $\text{Na}_2\text{SO}_4$  sharply reduces the effect of I. Application of  $\text{Na}_2\text{SO}_4$  to bread-making from infected wheat gave excellent results. B. Gutel

ASB 51.4 METALLURGICAL LITERATURE CLASSIFICATION

GOLDSTEIN, Boris I.

BALINSKIY, B. I.; GOLDSTEIN, B. I.; (2 and B. I. Listman and B. I. Schapiro ?)

"Concerning the Induction Problem of a Neural Plate Through Extractive and Synthetic Preparations"

Inst. of Zool. and Biochemistry; Acad. Sci. Ukrainian SSR

Doklady AN, 27, No. 5, 1940

BC

1-4

Forms of ascorbic acid in tissues. B. J. Goldstein, D. V. Volkenson, and S. A. Katscherova (*Ukrain. Biochem. J.*, 1941, 17, 201-217).—Liver, spleen, kidneys, and malignant tumours contain little or no dehydroascorbic acid. If tissues are extracted with 3%  $\text{HPO}_4$  and simultaneously reduced, or if the deproteinized filtrate is treated with nascent  $\text{H}_2$ , a new form of ascorbic acid is produced. The content of this form varies in parallel with the content of "masked" Fe and is nil in tumours since they contain no "masked" Fe. Reduction of tissues with nascent  $\text{H}_2$  in presence of high concn. of  $\text{HPO}_4$  increases the content of the new form, spleen and liver thus treated containing approx. as much of the new form as of free, reduced ascorbic acid. In the new form, ascorbic acid is bound to albumins by "masked" Fe associated with the albumins. Possibly the new form consists of two fractions, one of which is extracted by  $\text{HPO}_4$  and pyrophosphate and may be reduced in the filtrate or identified during simultaneous reduction of the tissues and extraction with 3%  $\text{HPO}_4$ ; the other and larger fraction is identified during simultaneous reduction of the tissues and extraction with 20%  $\text{HPO}_4$ .

W. McC.

ASB 51.4 METALLURGICAL LITERATURE CLASSIFICATION

GOLDSHTEYN, Boris I

**Determination of dehydroascorbic acid and free-ascorbic acid in tissues** B. I. Goldshteyn and D. A. Volkenron *Biochem. J. (Ukraine)* 17, 219-23 (1911); cf. C. A. 36, 3928<sup>2</sup> Dehydroascorbic acid in tissues is reduced by treatment with sulfosalicylic acid-Zn and detd. by titration with 2,6-dichlorophenol-indophenol. If much "masked" Fe is present,  $\text{HPO}_4$  is added after treatment with Zn in order to remove color and stabilize the ascorbic acid. The procedure is inapplicable to detn. of isolated dehydroascorbic acid since irreversible decomposition of its. The two fractions of the new form of ascorbic acid (L-ascorbic acid) are detd. similarly, the first after grinding the tissues with 3%  $\text{HPO}_4$  + 20% sulfosalicylic acid. In the detn. of the second fraction, 20%  $\text{HPO}_4$  is used in stead of 3%. B. C. P. A.

ASA 35.4 METALLURGICAL LITERATURE CLASSIFICATION



GOL'DSHTEIN, Boris I

Inst. of the City, 1-1-1911

Inst. Zoology, U.S.S.R. Acad. Sci.

$$H_{\text{eff}} = \sum_{\mathbf{r}} \left[ \frac{1}{2} \left( \frac{\partial \psi}{\partial t} \right)^2 + \frac{1}{2} \left( \frac{\partial \psi}{\partial x} \right)^2 + \frac{1}{2} \left( \frac{\partial \psi}{\partial y} \right)^2 + \frac{1}{2} \left( \frac{\partial \psi}{\partial z} \right)^2 + \frac{1}{2} \left( \frac{\partial \psi}{\partial t} \right)^2 + \frac{1}{2} \left( \frac{\partial \psi}{\partial x} \right)^2 + \frac{1}{2} \left( \frac{\partial \psi}{\partial y} \right)^2 + \frac{1}{2} \left( \frac{\partial \psi}{\partial z} \right)^2 \right] \quad (1)$$

2kur. . 1000000, 2000000, i 1000000, i . 10-11, 2000000

GOLDSHTEYN, Boris I

CA

11A

Changes of sulfur-containing amino acids within the protein molecule, and the influence of thyroid hormone. B. I. Goldshteyn, M. B. Gintsburg, E. A. Kohn, E. Yu. Mil'gram, and O. S. Sklovskaya (Inst. Exptl. Endocrinol., Moscow). *Biokhimiya* 11, 447-50 (1946). The changes in the SH groups and S-contg. amino acids in the muscle protein myosin were studied. During the prolonged extn. of myosin, some ATP always disappeared from the extn. The addn. of ATP lowered the SH content of myosin. It is postulat. that during the enzymic hydrolysis of ATP there takes place a perpetual transfer (oscillation) of the S atom from one peptide chain to the other, thus producing the first phase of muscular contraction. The amt. of free SH groups in myosin and hepatoxin increased during exptl. hyperthyroidism. This suggests that the thyroid hormone ruptures the thio ether linkages in proteins. The SH groups that are thereby formed are then oxidized. H. Priestley

GOLDSHTEYN, B. I. "Changes of Sulfur-containing Aminoacids within the Protein Molecule, and the Influence of thyroid Hormones"  
Dpt. of Biochem. Inst. of Experimental Endocrinology, Moscow;  
Biokhim., 11, No. 5, 1946

GOLDSHTEYN, Boris I

iron ascorbic acid in animal tissues. B. I. Goldshstein and D. A. Vol'kenzon (Inst. Exptl. Endocrinology, Moscow). *Biochimica* 12, 89-96(1947); cf. C.A. 30, 15414. -It had previously been detd. that there exists in animal tissues not only free, reduced ascorbic acid, but also ascorbic acid combined with proteins with the aid of mineral, or so-called easily dissolved Fe. The part of the protein to which Fe-ascorbic acid is attached is the nucleic acid. Only minute amts. of I are found in the cytoplasmic nucleic acid from malignant tumors. The thyroid hormone is capable of transforming the free ascorbic acid of tissues into I. H. Priestley

DEPT. OF BIOCHEMICAL, ALL-UNION INSTITUTE OF EXPERIMENTAL ENDOCRINOLOGY,  
MOSCOW

ASH 51.6 METALLURGICAL LITERATURE CLASSIFICATION

GOLDSHTEYN, Boris I

**Effect of autoxidizable iron complexes on the pregnancy of rats.** B. G. Goldshteyn, F. Z. Taraschanskaya, and V. A. Volkenko. *Vopr. Med. Biol.* 1977, 15(1), 1-5 (1977). *Russ. Engl. Summ.*  
*Hrynl. Eksp. Biol. Med.* 23, 200-2 (1947). Autoxidizable Fe-tartronic acid complex (20-30 mg.) injected up to 10 days after conception sharply terminates pregnancy in rats, with resorption of the embryo. The complex acts by reducing the ascorbic acid content of the corpora lutea and can be counteracted by simultaneous introduction of 0.025 mg. progesterone daily. Cf. *CA*, 42, 4655A.

Harold Outfield

ASAC 11.6 METALLURGICAL LITERATURE CLASSIFICATION



GOL'DSHTEYN, Boris I.

"Review of St. George's Book, 'The Activity of the Muscles' " - B. I. GOL'DSHTEYN

Biokhim., 13, No. 4, 1948

GOLDSHTEYN, Boris I

The mechanism of the action of vitamin C. B. I. Goldshteyn, D. A. Volkenzon, L. G. Kondrat'eva, and N. P. El'yanov. *Dokl. Akad. Nauk SSSR*, 1965, 15, 173-174 (1965), *ibid.* 16, 41, 51052. The chief function of ascorbic acid is to participate in the formation of desoxyribonucleic acid in the nuclei. It regulates the phys.-chem. properties of the nuclei (as the viscosity) and other important biol. functions (as fission). These conclusions are based on the following exptl. results. Nuclei were sepd. from the liver of guinea pigs by the method of Doumle (13, 37, 41, 69) at a pH of 4. The nuclei were dissolved in a 0.5% soln. of NaClO<sub>4</sub> (0.7 g./200 ml.). The relative viscosity was found at 15°

in an Ostwald viscometer. The soln. of the nuclei was hydrolyzed by heating for 2 hrs. at 30-35°. In the hydrolyzate ribose, desoxyribose, and P were detd. One group of guinea pigs received the ordinary lab. ration. Another group received the same ration which had previously been autoclaved. Finally, a third group was completely starved and received only water and ascorbic acid. The most characteristic feature about C-avitaminosis was the sharp drop in the viscosity of the nuclei dissolved in NaClO<sub>4</sub>, which amounted to about 10% of normal. Ribose increased and desoxyribose decreased in the soln. of the nuclei of the avitaminous animals. Ribonucleic, instead of desoxyribonucleic, acid had been formed. This also accounted for the change in viscosity. The mol. wt. of desoxyribonucleic acid is about 50 times as great as that of ribonucleic acid. No such changes were observed in the starved animals. In exptl. hypothyroidism, the decrease in ascorbic acid was accompanied by a decrease in the viscosity of the liver nuclei of guinea pigs. On feeding the exptl. animals ascorbic acid and thyroxine, the decrease in viscosity disappeared. H. Priestley

CA GOLDSHTEN, Boris I

118

Determination of iron-ascorbic acid in tissues of the animal organism. B. I. Goldshten, D. A. Vol'kenzon, and S. A. Kuchanova. *Referrinological Inst.*, Moscow. *In Khimya*, 15, 411-180 (1959), *Ch. C. I.*, 41, 51954.

Further evidence is given to support the view that animal tissues contain Fe-ascorbic acid bound with ascorbic acid. Although Fe can be titrated under certain conditions by 2,6-dichlorophenolindophenol, the result is much greater than the Fe found in tissues. When the ascorbic acid is titrated in the presence of 40% H<sub>2</sub>PO<sub>4</sub>, instead of HClO<sub>4</sub>, the Fe is not titrated by the indicator. Fe-ascorbic acid is detected by titrating a constant 0.1 g. tissue with 1 ml. of 0.1% water, and 0.1 ml. 20% sulfosalicylic acid in 1 ml. 10% H<sub>2</sub>PO<sub>4</sub>. The material is quantitatively transferred to a wide test tube, the mortar is washed with 1 ml. 10% sulfosalicylic acid, and 0.02 g. Zn dust is added. The tube is warmed for 30 min. at 52°. The contents are filtered, washed twice with 1 ml. sulfosalicylic acid, and titrated with 2,6-dichlorophenolindophenol. The same procedure, but without the Zn dust, is used for detg. free ascorbic acid in the tissue. The difference represents the Fe-ascorbic acid. An increase of both free and Fe-ascorbic acids was found in the tissues of guinea pigs that had been fed daily 25 mg. cryst. ascorbic acid for 35-45 days. It has been shown polarographically that ascorbic acid is liberated when nucleic acid is treated with Zn dust in the presence of H<sub>2</sub>PO<sub>4</sub>. The presence of ascorbic acid in the nucleic acid from rabbit liver was confirmed by the isolation of the 2,4-dinitrophenylhydrazone. H. Prostev.



GOL'DSHTEYN, Boris I.

"Chemical Structure of Myosin and the  
Nature of Muscular Contraction," Ukr.  
Biokhim. zhur., 22, No.3, 1950

GOL'DSHTZYN, B.I.; KONDRAT'YEVA, L.G.; GERASIMOVA, V.V.

Effect of vitamin C on conversion of nucleic acids in cell in the animal organism. Biokhimiia, Moskva 17 no.3:354-361 May-June 1952.

(CML 25:1)

1. Biochemical Laboratory of the Scientific-Research Institute of Nutrition of the Ministry of Public Health Ukrainian SSR, Kiev.

GOL'DSHTEYN, Boris I.  
B.I.

Mechanism of the action of thyroid gland hormones. Ussr.blokhim.zhur. 24 no.2:  
160-171 '52. (MLRA 6:11)

1. Otdel biokhimii Vsesoyuznogo instituta eksperimental'noy endokrinologii,  
Moskva. (Hormones) (Thyroid gland)

GOLDSHTEYN, Boris I

Effect of vitamin C on transformations of nucleic acids in cells of the animal organism. B. I. Goldshtein, I. G. Koshalova and A. V. Gerasimova. Ministry Health, Kirov. *Trud. Vses. Nauch. K.* 83: 150-152, 1952. 3 p. 1-45. (1952). Ribonucleic acid (RNA) of the cytoplasm changes deoxyribonucleic acid (DNA) of the nucleus, and in specimens of malignant tumors, intestinal tumors, and in specimens of avitaminotic guinea pig. The possible participation of ascorbic acid in formation of RNA is indicated and may be the main function of this vitamin is a component of cell growth and development. In this respect showed clearly especially with tumor tissues, that in C-avitaminosis, dehydro of RNA and a rise of RNA. The reverse phenomenon, formation of RNA from RNA in the presence of vitamin C, could not be shown in normal tissues but did occur readily in tumor specimens of sarcoma. (C. M. Kozlov)

GOLDSHTEYN. B.I.

✓ Vitamin C, its forms and the mechanism of its action in the tissues of the animal organism. B. I. Goldshtein (Sci. Research Inst. Nutrition, Ministry of Health, Ukr. S.S.R., Kiev). *Vitaminy, Akad. Nauk Ukr. S.S.R.* 1953, 197-207. Data are presented which indicate that the animal cells contain not only free ascorbic acid (I), but also Fe-I bound on nucleic acids with the Fe between the phosphate and I, that ribonucleic acid of the cytoplasm is transformed into deoxyribonucleic acid (II) of the cell nuclei of the animal tissue, and that I participates in the biosynthesis of II. E. Wierbleki

GOL'DSHTEYN, B. I.

1. The effect of vitamin C upon the conversion of nucleic acids in animal tissues. B. I. Gol'dshchik, V. V. Gerasimova, and L. G. Kondratova (Inst. Nutrition Ministry of Health, M.F. S.S.R., Kiev). *Biohimiya* 19: 331-33 (1964); cf. *C.A.* 47, 713c.—The *in vitro* expl. set up was the same as previously described with guinea pigs and expl. animals. The max. activity of vitamin C (I) and ribonucleic acid (II) as reaction activators in the formation of deoxyribonucleic acid (III) in the cells of animal organisms is attained at a concn. of I of 5 mg./g. of tissue and of II of 10 mg./g. of tissue. The pH optimum for the reaction is between 6.8 and 8.0. Following the destruction of the cell structure the reaction of formation of III and the influence of

fluid II could not be observed. The reaction of formation of III in the cell is activated by I and dehydroascorbic acid and is not activated by the nonreversible products of I, specifically diketogluconic acid. In Cavitaminosis (early, or late stages) the inclusion of I<sub>2</sub> into III of the nucleus of the animal and of the spleen of the guinea pig is sharply slowed down as compared with that of normal or starvation conditions. The introduction of I fully restores the rate of I<sub>2</sub> inclusion into III of the nucleus. A sharp reduction in the inclusion into III of the nucleus of the small intestine and of the liver of guinea pigs was observed under conditions of Cavitaminosis and the introduction of radioactive P 2 hrs. prior to killing the animal. The introduction of I 2 hrs. prior to killing the animal counteracts the above effect of Cavitaminosis. This indicates that the action of I upon the rate of formation of III of the cell nucleus is direct and rapid. A check of the data obtained in the sign. of nucleic acids by the methods of Schmidt and Thannhauser (*C.A.* 46, 2314) and of Davidson, *et al.* (*C.A.* 46, 1134) indicated that the general rule concerning the effect of Cavitaminosis on the rate of removal of II and III by the tissues of the animal organism, studied with the aid of radioactive I, is independent of the difference in the method used in the sign. of the nucleic acids. H. S. Lach

GOLDSHTEYN, B. I.

# USSR

Biological properties of sulfhydryl groups of cellular proteins. B. I. Goldshtein. *Uspehi Sovetskoi Biol.* 26:0-03(1984). The reactivity of SH groups of proteins can be altered by a variety of physical factors. Thyroxine is one of the factors and muscular contraction itself. Thyroxine affects the reactivity of SH groups of several enzyme proteins, and in this property of thyroxine the principal role as a physical regulator of the SH activity of tissue proteins. Changes in the activity of SH groups of myosin during contraction suggest a role for the SH groups of proteins in muscular contraction. Thyroxine homogeneously affects the activity of the mitochondrial enzymes via the oxidation of the activity of their SH groups. The effects within the protein mol. which affect the reactivity of its SH groups are still unknown. These may be changes in conformation or local break, weakening, or appearance of new bonds within the protein mol. Denaturation is not the only change that produces increases in the SH activity of proteins. 26 references. I. A. Siskind

GOL'DSHTEYN, B.I.,, GERASIMOV, V.V., KONDRAT'YEVA, L.G.

"Vitamin C Influencing the Velocity of Regeneration of Nucleic Acids in Cells of Animal Organism"; in the book Experience in the Use of Radioactive Isotopes in Medicine R. Ye. KAVETSKIY and I.T. SHEVCHENKO, published by the COSMEDIZDAT Publishing House of the UKRAINIAN SSR, KIEV 1955, represents medical transactions of a conference held in KIEV from 18-20 January 1954.

So: 1100235



GOLDSHTEYN, B. I.

USSR/Human and Animal Morphology - Metabolism

R-3

Abs Jour : Referat Zhur - Biologii, No 10, 1957, 70661

Author : Goldstein, B.I.

Title : The Influence of Sulfhydryl Groups on Biological Properties of Tissue Protein.

Orig Pub : Genetika USSR, 1955, 47 pages.

Abstract : No abstract

Card 1/1

- 2b -

GOL'DSHTAYN, B.I.

GOL'DSHTAYN, B.I.

Vitamin C and nucleic acids. Vitaminy no.2:123-133 '56. (MLA 10:8)

1. Biokhimicheskaya laboratoriya Nauchno-issledovatel'skogo instituta pitaniya Ministerstva zdravookhraneniya USSR, Kiev  
(ASCORBIC ACID) (NUCLEIC ACIDS)

GUZ', B.I. [Huz', B.I.]; GOL'DSHTEYN, B.I.; IVANYUK-BEL'IGA, Ye.I. [Ivaniuk-Beluga, Ye.I.]; SHVEDKOVA-ROSHE, T.S.

Compound therapy in cervical cancer. Ped., akush. i gin. 19 no.1:  
36-42 '57. (MIRA 13:1)

1. Kiyevskiy rentgeno-radiologicheskiy i onkologicheskiy institut  
(direktor - prof. I.T. Shevchenko) i Institut pitaniya Ministerstva  
okhrany zdorov'ya USSR (direktor - A.G. Stovbun).  
(UTERUS--CANCER) (IRON SODIUM TARTRATE)

GOL'DSHTEYN, B.I.; GOTOVTSEVA, Ye.P.

Effect of thyroid hormone on SH groups and on sulfur-containing amino acid oxidase of D-amino acids of the liver [with summary in English]. Biokhimiia 22 no.6:994-999 N-D '57. (MIRA 11:2)

1. Biokhimicheskaya laboratoriya Nauchno-issledovatel'skogo instituta pitaniya Ministerstva zdravookhraneniya USSR, Kiev.

(THYROXIN, effects,

on liver sulfhydryl cpds. & D-amino acid oxidase (Rus))

(LIVER, metabolism,

D-amino acid oxidase & sulfhydryl cpds., eff. of thyroxin (Rus))

(OXIDASES,

D-amino acid oxidase, in liver, eff. of thyroxin (Rus))

(SULFHYDRYL COMPOUNDS, metabolism,

liver, eff. of thyroxin (Rus))

USSE/Human and Animal Physiology (Normal and Pathological).  
Metabolism, Nitrogen Metabolism.

T-2

Abstr Jour : Ref Zhur - Biol., No 16, 1958, 74582

Author : Gol'dshteyn, B.I., Gerasimova, V.V., Kondrat'yeva, L.G.

Inst : AS USSR

Title : The Participation of Vitamin C in the Biosynthesis of  
Nucleic Acids.

Orig Pub : V. sb.: Vitaminy, 3, Kiev, AN USSR, 1958, 129-141.

Abstract : No abstract.

Card 1/1

- 14 -

GOL'DSHTEYN, B.I.; GERASIMOVA, V.V.

Significance of ascorbic acid in the formation of desoxypentose  
compounds due to the effect of animal tissue extracts. Biokhimiia  
25 no.2:340-343 Mr-Apr '60. (MIRA 14:5)

1. Biokhimicheskaya laboratoriya Kiyevskogo nauchno-issledovatel'skogo  
instituta epidemiologii i mikrobiologii.  
(ASCORBIC ACID) (TISSUE EXTRACTS)  
(RIBOSE)

GOLDSHTEYN, B. I., and GERASIMOVA, V. V.

"On the Carbohydrate Component of Desoxyribonucleic Acid and The Effect on it of Ascorbic Acid in the Tissues of the Animal Organism.

report submitted for the 5th Intl. Congress of Biochemistry, Moscow, 10-16 Aug 1961.

Biochemical Lab, Inst. of Gerontology and Exptl. Pathology, Acad Medical Sci USSR

1. The first part of the document is a list of

"The first part of the document is a list of

"The first part of the document is a list of



CHEN, N.G.; GOL'DSHEYN, B.I.; IONINA, M.A.

Studying the anticorrosive and antiscale properties of phenol waters of the Yenakiyevo Coke and Coal Chemicals Plant. Koks i khim. no.10:46-49 '63. (MIRA 16:11)

1. Dneprodzerzhinskiy metallurgicheskiy zavod-vtuz (for Chen).
2. Yenakiyevskiy koksokhimicheskiy zavod (for Gol'dshteyn, Ionina).



GULYY, M.F., akademik, otv. red.; BELITSER, V.A., red.;  
GERSHENZON, S.M., red.; GOL'DSHTEYN, B.I., red.;  
VIZIR, P.Ye., red.; TROITSKIY, G.V., red.; MARTYNERKO,  
F.P., red.; YANKOVSEKAYA, Z.B., red.

[Proteins in medicine and the national economy; blood  
proteins, glucose oxidase] belki v meditsine i narod-  
nom khoziaistve; belki krovi, glukozoksidaza. Kiev,  
Naukova dumka, 1965. 247 p. (MIRA 1845)

1. Simpozium po voprosam proizvodstva i primeneniya  
glyukozooksidazy. Kiev, 1964. 2. Krymskiy meditsinskiy  
institut, Simferopol' (for Troitskiy). 3. Institut  
biokhimii AN Ukr.SSR, Kiev (for Gulyy).

SECRET

1. The purpose of this document is to provide information on the activities of the Central Intelligence Agency (CIA) in the area of intelligence gathering and analysis.